

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,855	02/19/2002	Seiji Kozaki	2611-0176P	2469
2292 75	90 08/05/2005		EXAMINER	
BIRCH STEWART KOLASCH & BIRCH			WANG, LEMING	
PO BOX 747 FALLS CHURO	CH, VA 22040-0747		ART UNIT PAPER NUMBER	
	•		2638	
			DATE MAILED: 08/05/2005	5

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
	10/049,855	KOZAKI ET AL.	And
Office Action Summary	Examiner	Art Unit	-1410
	Leming Wang	2638	
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet	with the correspondence addr	ess
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period v Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may within the statutory minimum of will apply and will expire SIX (6) M, cause the application to become	a reply be timely filed thirty (30) days will be considered timely. ONTHS from the mailing date of this commoderate (35 U.S.C. § 133).	munication.
Status			
 1) Responsive to communication(s) filed on <u>04 M</u> 2a) This action is FINAL. 2b) This 3) Since this application is in condition for alloware closed in accordance with the practice under E 	action is non-final.	•	nerits is
Disposition of Claims			
4) ☐ Claim(s) 1-6,9 and 11-13 is/are pending in the 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-6,9 and 11-13 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	vn from consideration.		
Application Papers			
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomplicated any not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.	epted or b) objected in objected in objected in objected in objected in abeyon is required if the drawi	vance. See 37 CFR 1.85(a). ng(s) is objected to. See 37 CFR	
Priority under 35 U.S.C. § 119			
 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority documents * See the attached detailed Office action for a list 	s have been received. s have been received ir rity documents have be u (PCT Rule 17.2(a)).	n Application No en received in this National St	tage
Attachment(s)			
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date S Patent and Trademark Office	Paper N	w Summary (PTO-413) No(s)/Mail Date of Informal Patent Application (PTO-1	152)

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 9, 11, and 13 have been considered, but are most in view of new ground(s) of rejection.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-6, 9, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Yuki et al.* (US patent No: 6,778,557) in view of *Haartsen* (US Patent No: 6,393,007).

Regarding claims 1 and 9, *Yuki et al.* teach an optical burst transmission / reception control system comprising: a plurality of slave station apparatuses (10-1, 10-2, ..., Fig.1) which commonly use a transmission band (Col.1, lines 16-23), and a host station apparatus (20, Fig.3) which posts band allocation information for controlling of use transmission bands (Fig.12, Col.19, lines 39-42, 53-59) of said slave station apparatuses (10, Fig.2) to said slave station apparatuses, wherein said respective slave

station apparatuses transmit data to said host station apparatus (Col.2, lines 50-54; Col.63, lines 38-39) based on the band allocation information posted from said host station apparatus (Col.2, 25-28), wherein said host station apparatus has band allocation control unit (27, Fig.3, 802 Fig.80), and when the band allocation control unit controls band allocation for a slave station apparatus which does not identify a type of data to be transmitted (Col.5, lines 38-41, Col.74, lines 3-5), said band allocation control unit posts band identification information including identification of the slave station apparatus to the slave station apparatus (Col.5, lines 33-37). *Yuki et al.* further teach the said plurality their slave station apparatuses (Col.64, lines 14-19), which identify a type of data to be transmitted (Col.63, lines 4-7), have a data transmission control unit (17, Fig.80).

Yuki et al. differ from the claimed invention in that Yuki et al. do not teach identify the data type and transmit data to said host station apparatus according to the data types. However, Haartsen from the same field of endeavor teach a method to separate between time slots allocated to voice communication channels and to data communication (Col.3, lines 45-50, Col.4, lines 26-32, inherently a data type must be identified in a information sent to slave station). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of invention to adapt a time-slot allocation method, such as the one of Haartsen, into the system of Yuki et al. in order to provide optimum interference diversity for voice communication.

Application/Control Number: 10/049,855

Art Unit: 2638

Regarding claim 2, *Yuki et al.* further teach host station a management information (PLOAM: Physical Layer Operations Administration and Maintenance) cell respective slave station apparatuses (For example, Col.14, lines 13-33, where Physical Layer Operation Administration Management (PLOAM) cell contains management information).

Regarding claim 3, *Yuki et al.* further teach the information is use authorizing information of time band allocation slots defined a transmission direction from said slave station apparatuses to said host station apparatus (For example, slave stations send data information to master station based on the master's introduction in time slot is show in Fig.57; Col.69, 9-11; Col. 46, lines 14-18; Col.13, lines 2 and 6).

Regarding claim 4, *Yuki et al.* further teach the data types are types of fixed-speed data (Col.5, 9-15) and burst data (Col.24, lines 61-62, Col.59, lines 66-67, Col.60, lines 5-8) request intermittently or temporarily.

Regarding claim 5, *Yuki et al.* further teach a band request detection unit (711 and 712 Fig.82, Col.70, line 44-48, where "guaranteed-service input data" includes burst type of data according to Col.39, lines 44-49) which detects generation of band request (Col.70, lines 60-65), and wherein said band allocation control unit (802 Fig.80 and 27 Fig.3), as initial setting, allocates a band (804 Fig.80) to fixed speed data (Fig.56, Col.46, lines 37-39), and when said band request detection unit (812 Fig.83) detects band request, said band allocation control unit allocates a band to burst data (Col.60,

Application/Control Number: 10/049,855

Art Unit: 2638

lines 12-15; Col.72, lines 5-11, where "guaranteed-service input data" includes burst type of data according to Col.39, lines 44-49) which are newly generated.

Regarding claim 6, *Yuki et al.* teach the slave station apparatuses further have a band request unit (711, 712, Fig.82, Col.70, lines 44-47, wherein "guaranteed-service input data" includes burst type of data according to Col.39, lines 45-49) which, requests said host station apparatus to allocate band to the burst data (Col.60, lines 12-15; Col.72, lines 5-11, where "guaranteed-service input data" includes burst type of data according to Col.39, lines 44-49).

Regarding claim 11, *Yuki et al.* teach that an optical burst transmission/reception control method, in which a plurality of slave station apparatuses (10-1, 10-2, ..., Fig.1) commonly use a transmission band (Col.1, lines 16-23), and a host station apparatus (20, Fig.3) posts band allocation information (Fig.12; Col.12, lines 39-42; Col.19, lines 53-59) for controlling allocation of use transmission bands of said slave station apparatuses to said slave station apparatuses (10, Fig.2), and said respective slave station apparatuses transmit data (Col.2, lines 50-53) to said host station apparatus (20, Fig.3) based on the band allocation information posted from the host station apparatus (Fig.12, Col.19, lines 53-59), the method comprising: the band allocation control step of when said host station controls band allocation for a slave station apparatus which does not identify a type of data to be transmitted (In some methods taught by *Yuki et al.*, only the address of slave station is identified, see for example, Col.5, lines 38-41, Col.74,

lines 3-5), posting band identification information including identification of the slave station apparatus to the slave station apparatus(Col.5, lines 33-37), and when said host station controls band allocation for a slave station.

Yuki et al. differ from the claimed invention in that Yuki et al. do not teach identify the data type and transmit data to said host station apparatus according to the data types. However, Haartsen from the same field of endeavor teach a method to separate between time slots allocated to voice communication channels and to data communication (Col.3, lines 45-50, Col.4, lines 26-32, inherently a data type must be identified in a information sent to slave station). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of invention to adapt a time-slot allocation method, such as the one of Haartsen, into the system of Yuki et al. in order to provide optimum interference diversity for voice communication.

Regarding claim 12, *Yuki et al.* teach the band allocation information posted at said band allocation control step (Fig.40, Col.35, lines 56-59; Col.36, lines 44-46, Col.37, lines 8-19, 22-28; Col.63, lines 33-37; Col.62, lines 37-38) is information about a plurality grouped data types (Col.39, lines 45-48).

4. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Yuki et al.* (US patent No: 6,778,557) in view of *Lobbett et al.* (US Patent No: 6,201,622)

Application/Control Number: 10/049,855

Art Unit: 2638

Regarding claim 13, *Yuki et al.* teach the detecting the band request step of: when the detection step detects the input of the burst data, transmitting band request of the burst data to said host station apparatus by said slave station apparatus (712 Fig.82, Col.70, lines 44-48, where "guaranteed-service input data" includes burst type of data according to Col.39, lines 44-49), and wherein when said host station apparatus detects the band request, said band allocation step posts the band request including the band allocation information about the burst data to said slave station apparatuses (Col.72, lines 5-14, where "guaranteed-service input data" includes burst type of data according to Col.39, lines 42-49).

Yuki et al. differ from the claimed invention in that Yuki et al. do not teach identify the data type and transmit data to said host station apparatus according to the data types. However, Haartsen from the same field of endeavor teach a method to separate between time slots allocated to voice communication channels and to data communication (Col.3, lines 45-50, Col.4, lines 26-32, inherently a data type must be identified in a information sent to slave station). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of invention to adapt a time-slot allocation method, such as the one of Haartsen, into the system of Yuki et al. in order to provide optimum interference diversity for voice communication.

The system of *Yuki et al.* modified by *Haartsen* differs from the invention in that *Yuki et al.* and *Haartsen* do not teach the detection step of detecting as to whether or not burst data are input into said slave station apparatuses by said slave station apparatuses. However, *Lobbett et al.* teach a method to detect the start of a data burst

(Col.5, lines 11 –12). Therefore, it would have been obvious to a person having ordinary skill in the art at the time of the invention to incorporate a method of *Lobbett et al.* into the point to multipoint communication system of *Yuki et al.* and *Haartsen* to detect the input of a data burst to start a band allocation request for the burst data in order to improve the stability of reception for packet data streams in optical transmission system.

Conclusion

5. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leming Wang whose telephone number is 571 272 3030. The examiner can normally be reached on 8:30AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on 571 272 3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Leming Wang 7/28/2005

KENNETH VANDERPUYE PRIMARY EXAMINER